ABSTRACT

Methods and compositions are provided for nucleic acid analysis. The method employs a primer and a probe that bind to a target nucleic acid sequence, where the primer has an effector agent, which causes cleavage of a bond when the primer and the probe are bound to the same target molecule. The primer and probe have arms that do not bind to the target, hybridize with each other and comprise the effector and cleavable bond, where the probe has a tag defining the probe that is released upon bond cleavage. By having the probe complex at a lower T_m than the primer complex, the probe is released and can be cycled